

## 98TH GENERAL ASSEMBLY State of Illinois 2013 and 2014 SB3492

Introduced 2/14/2014, by Sen. Dan Kotowski

## SYNOPSIS AS INTRODUCED:

225 ILCS 732/1-99.5 new

Amends the Hydraulic Fracturing Regulatory Act. Provides that the Department of Natural Resources shall suspend the acceptance or approval of any and all new or modified permits for high volume horizontal fracturing wells and operations, horizontal drilled wells with fracturing operations, and Class II injection wells that are near specified areas. Establishes the Illinois Active Earthquake Zone Investigative Task Force. Provides requirements for the Task Force's investigation and report concerning the effects of hydraulic fracturing, horizontal drilling, and Class II injection wells on seismicity in this State. Effective immediately.

LRB098 19570 MGM 54760 b

1 AN ACT concerning regulation.

## Be it enacted by the People of the State of Illinois, represented in the General Assembly:

- Section 5. The Hydraulic Fracturing Regulatory Act is amended by adding Section 1-99.5 as follows:
- 6 (225 ILCS 732/1-99.5 new)
- 7 <u>Sec. 1-99.5. The Illinois Active Earthquake Zone</u> 8 Investigative Task Force.
- 9 (a) The Department shall, on the effective date of this amendatory Act of the 98th General Assembly, suspend the 10 acceptance or approval of any and all new or modified permits 11 for high volume horizontal fracturing wells and operations, 12 horizontal drilled wells with fracturing operations, and Class 13 14 II injection wells that are located within any and all counties that wholly or partially contain any part of the New Madrid 15 16 seismic zone, the Wabash Valley seismic zone, Cottage Grove fault system, Rough Creek-Shawneetown fault system, 17 magmatic system of Hicks Dome, the Illinois-Kentucky Fluorspar 18 19 District, or the NNW-trending La Salle, Du Quoin, and Clay City 20 fold systems. The Department shall also suspend any approval of 21 waste management plans for high volume horizontal fracturing 22 wells and operations, horizontal drilled wells with fracturing operations, for disposal of oil, liquid natural gas, or natural 2.3

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gas waste in existing Class II injection wells if they are 1 2 located within any and all counties that wholly or partially 3 contain any part of the New Madrid seismic zone, the Wabash Valley seismic zone, Cottage Grove fault system, Rough 4 Creek-Shawneetown fault system, the magmatic system of Hicks 5 the Illinois-Kentucky Fluorspar District, or the 6

NNW-trending La Salle, Du Quoin, and Clay City fold systems.

- (b) The Department shall work with the Illinois State Geological Survey to perform probability mapping of all active seismic zones in this State listed in subsection (a). Using existing data and resources at the Illinois State Geological Survey and the United States Geological Survey, along with data on faults in brittle rock, the Illinois State Geological Survey shall outline, for each county, the areas of the active faults listed in subsection (a) that carry a high, medium, and low probability of seismicity from oil, liquid natural gas, and gas waste disposal in Class II injection wells.
- (c) The Illinois Active Earthquake Zone Investigative Task Force is hereby created. The Task Force shall have the following members:
  - (1) the Director, or his or her representative, from each of the following State agencies: the Illinois Emergency Management Agency, the Department of Natural Resources, the Department of Public Health, the Illinois State Water Survey, the Illinois Pollution Control Board, the Illinois Environmental Protection Agency, the Illinois

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1	State Geological Survey, and the Department of Insurance;
2	(2) one independent expert in risk assessment in
3	earthquake zones and its impact on insurance rates and
4	ratings appointed by the Director of Insurance;
5	(3) one university-based independent seismologist with
6	expertise in induced seismicity appointed by the Director
7	of the Illinois State Geological Survey; and
8	(4) one member from the Illinois Attorney General's
9	office appointed by the Attorney General.
10	(d) The chairperson of the Illinois Active Earthquake
11	Investigative Task Force shall be the Director of the Illinois
12	Emergency Management Agency, or his or her representative. The
13	members shall be appointed no later than 60 days after the
14	effective date of this amendatory Act of the 98th General
15	Assembly.
16	The Illinois Active Earthquake Investigative Task Force
17	shall:
18	(1) Meet once a month, either in person or through
19	video conferencing capabilities, beginning no later than
20	90 days after the effective date of this amendatory Act of
21	the 98th General Assembly.
22	(2) Operate without pay, but with all expenses paid for
23	the functioning of the Task Force to be allocated by the

Illinois Emergency Management Agency.

(3) Provide a fully researched report, within 2 years

after the effective date of this amendatory Act of the 98th

General	Assembly.

- (4) Investigate any and all adverse effects, or risks, of induced seismicity by the disposal of oil, liquid natural gas, and natural gas waste in Class II injection wells in active earthquake zones. And in particular, if the Class II injection wells are located within any and all counties that wholly or partially contain any part of the New Madrid seismic zone, the Wabash Valley seismic zone, Cottage Grove fault system, Rough Creek-Shawneetown fault system, the magmatic system of Hicks Dome, the Illinois-Kentucky Fluorspar District, or the NNW-trending La Salle, Du Quoin, and Clay City fold systems.
- (5) Examine the probability of induced seismicity in Illinois active seismic zones and any and all adverse effects or risks of possible induced seismicity on:
  - (A) water resources, water wells, aquifers, dams, canals, any possible contamination, and the environment, including possible soil and air contamination;
  - (B) public health effects, including mental health adverse effects of repeated induced seismic events;
  - (C) adverse effects on property, including
    livestock and domesticated animals;
  - (D) adverse effects on tourism and recreational activities in the active seismic zones of this State;
    - (E) risk management issues, including emergency

- (F) risk management issues, including liability issues, bonding issues, and insurance requirements for operators, well owners, land owners, mineral rights owners, lessors, and subcontractors and the effects on insurance rates and ratings, mortgages, small businesses and their insurance and mortgage rates and availability;
- (G) effects on the mechanical integrity of the oil, liquid natural gas, and natural gas wells, Class II injection wells, and the oil, liquid natural gas, and natural gas industry critical infrastructure, including pipelines, and any possible contamination from a breach of mechanical integrity of these structures;
- (H) effects of potential spillage, leakage, fires, or blowouts of the oil, liquid natural gas and natural gas wells, fracturing waste and waste water containment structures including open pits, oil, liquid natural gas and natural gas processing infrastructure, and transportation infrastructure, including pipelines, secondary to possible induced seismicity;
- (I) effects of potential spillage, leakage, fires, or blowouts of chemicals, proppants, and byproducts, and their containment, processing, and transportation

1	infrastructure, secondary to possible induced
2	seismicity;
3	(J) the safety of any nuclear power plants, uranium
4	processing plants, or low level radioactive waste
5	storage sites in this State and the surrounding states
6	that might be impacted by induced seismicity triggered
7	within the active seismic zones in this State;
8	(K) the risks of inducing a major earthquake,
9	greater than magnitude 6, either immediately or in the
10	future, on all of the issues delineated in this
11	Section, and the risk management issues involved with a
12	higher level of induced seismicity; and
13	(L) whether the Green Light, Yellow Light, Red
14	Light system of mitigation of induced seismicity,
15	proposed by the Illinois State Geological Survey and
16	the Department of Natural Resources, is appropriate or
17	sufficient for real mitigation of all adverse effects
18	of induced seismicity in the active seismic zones in
19	this State.
20	(e) The Illinois Active Earthquake Zone Investigative Task
21	Force shall investigate the issues under subsection (d) and
22	write a report to be submitted on or before January 1, 2017 to
23	the General Assembly, the Governor, the Hydraulic Fracturing
24	Task Force, the Illinois Emergency Management Agency, the
25	Department of Natural Resources, the Department of Public
26	Health, the Illinois State Water Survey, the Illinois Pollution

Τ	Control Board, the Illinois Environmental Protection Agency,
2	the Illinois State Geological Survey, the Department of
3	Insurance, the Illinois Attorney General, and to the public via
4	the website of the Illinois Emergency Management Agency and the
5	website of the Department of Natural Resources. The report
6	shall be as complete as possible when discussing the risks and
7	the possible mitigation of the risks of induced seismicity
8	shall include recommendations and conclusions about naturally
9	occurring seismic events in the active seismic zones listed in
10	<pre>section (a), including:</pre>
11	(1) the risks of drilling and extracting oil, liquid
12	natural gas, and natural gas in active seismic zones;
13	(2) the risks of drilling and operating Class II
14	injection wells in active seismic zones;
15	(3) the use of fracturing waste or wastewater open pits
16	in active seismic zones;
17	(4) earthquake induced contamination of air, water,
18	and soil from oil and natural gas extraction operations and
19	waste disposal, the clean up and public health effects of
20	the contamination;
21	(5) emergency management recommendations during
22	earthquakes involving areas of oil and natural gas
23	operations and infrastructure;
24	(6) earthquake induced spillage and leakage from oil
25	and natural gas wells;
26	(7) oil and natural gas infrastructure instability

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1	during earthquakes;
2	(8) bonding requirements for oil and natural gas
3	operations and infrastructure in active seismic zones;
4	(9) insurance requirements for oil and natural gas
5	operations and infrastructure in active seismic zones;
6	(10) best practices for the oil and natural gas
7	industry in active seismic zones; and
8	(11) any and all emergency management, transportation,
9	and communication recommendations related to the oil and
10	natural gas industry and its operations before, during, and
11	after an earthquake.
12	(f) The report shall include recommendations to the General
13	Assembly and Governor for legislation to protect the public
14	health and environment, property, livelihoods, and communities
15	from all reported adverse affects of induced seismicity in the
16	Illinois active seismic zones, including recommendations to
17	the General Assembly about legislation to limit damages, harms,
18	risks, contamination, and legal challenges over liability
19	secondary to naturally concurring seismic events in the active
20	seismic zones and how to mitigate the risks from blowouts,
21	spillage, leakage, and damages to the mechanical integrity of
22	oil, liquid natural gas, and natural gas wells, drilling, Class
23	II injection wells, waste and waste water containment,
24	pipelines, infrastructure, chemicals, proppants, and

byproducts. This report shall also include any and all

emergency management, transportation, and communication

- 1 recommendations related to the oil and natural gas industry and
- 2 its operations before, during, and after induced seismicity and
- 3 <u>naturally occurring seismic events.</u>
- 4 (g) The Illinois Active Earthquake Zone Investigative Task
- 5 Force shall submit its report on or before January 1, 2017. The
- 6 Task Force shall be dissolved on July 1, 2017.
- 7 Section 99. Effective date. This Act takes effect upon
- 8 becoming law.